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ABSTRACT

As part of the National Study of American Indian Education, this report assessed the validity of the analysis of interview and questionnaire data obtained. With some significant exceptions, agreement was good between the rating scale and questionnaire analysis and the field workers' observations on ranking and ccmparing the 4 schools: 3 public schools serving Indian communities on the Olympic Peninsula in Washington and 1 state-operated school in Bethel, Alaska. (See other papers in Series IV of the Naticnal Study, especially numbers 1, 7, 9, 10, 11, and 12.) Discrepancies revealed in comparison of results from the 2 types of evaluation were that (1) in evaluating parental opinions of the school administration in the schools, the field team was in marked disagreement with the scale results; (2) in ranking the 4 schools according to the teachers' "understanding of the local Indian ccmmunity," there was no agreement on the ranking of 3 of the 4 schools; (3) the scales sometimes failed to differentiate between schools where the field workers felt they could; and (4) the field workers sometimes felt that no meaningful differentiation between, or ranking of, schools could be done where it had been done with the scale results. A final conclusion was that field workers need to add their observations and interpretations to the results of the interview and questionnaire analysis in preparing the reports of this study. (LS)

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NATIONAL STUDY OF AMERICAN INDIAN EDUCATION

USOE
PROJECT OEC-0-8-080147-2805

FINAL REPORT

Perceptions of Indian Education

Series IV

No. 8

The Validity of Rating Scales and Interviews for Evaluating Indian Education

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NATIONAL STUDY OF AMERICAN INDIAN EDUCATION

The attached paper is one of a number which make up the Final Report of the National Study of American Indian Education.

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The Final Report consists of five Series of Papers:

I. Community Backgrounds of Education in the Communities Which Have Been Studied.

II. The Education of Indians in Urban Centers.

III. Assorted Papers on Indian Education--mainly technical papers of a research nature.

IV. The Education of American Indians--Substantive Papers.

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The Validity of Rating Scales and Interviews for Evaluating Indian Education*

The problem we set ourselves in preparing this report is to try to assess the validity of our analysis of the interview and questionnaire data obtained in the National Study of American Indian Education. We want to know how closely our analysis and interpretation of the variables we have attempted to measure corresponds to the "real situation." Like any social scientist, we have no perfect means of determining what "really is." In our case, the best we can do is to assess the "concurrent validity" by comparing two different analyses of the same set of several communities. From the earliest stages of planning in the National Study of American Indian Education, efforts have been made to insure that two basic techniques of data-gathering and analysis would be employed: (1) through instruments such as interviews, questionnaires, inventories and tests, and (2) through direct observation in the field. We can therefore carry out a comparison of the results of these two approaches in an effort to measure the concurrent validity.

We could not possibly test the degree of concurrence between the interview and questionnaire analysis and the observations of our dozens of field workers in 7 different field centers. We had to content ourselves with comparing our analysis with the observations of the three principal field investigators from one center--the "San Francisco field team." The three principal investigators in this team were: Dr. John Connelly, director, and Dr. Ray and Mrs. Carol Barnhardt, assistants to Dr. Connelly in the field. These individuals spent six to eight weeks in each of the five communities they studied. Connelly and Ray Barnhardt had had considerable training and experience in techniques of field observation.

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*This report is one of a series on the results of the rating scale analysis done using Student, Parent, Community Leader and Teacher Interviews recorded by personnel on the National Study of American Indian Education. The reader will understand what is discussed in this paper better if he is familiar with the other papers in Series IV of the Final Report of the National Study of American Indian Education, particularly numbers 1, 7, 8, 9, 10, 11 and 12. Paper No. 1 lists the schools studied and some of their characteristics and the nature of the field research. Paper No. 7 includes examples of the interview schedules and rating scales utilized in the Study and describes how they were formulated and used. Papers No. 8 and No. 9 deal with the validity and reliability of the rating scales and interviews. Numbers 11 and 12 are based on the results of the rating scale and questionnaire analyses. Number 10 deals with the attitudes of Indians toward their culture. Number 11 reports on the evaluations Indians make of their schools. Number 12 discusses the attitudes of Indians toward formal education, of teachers toward Indians, and the communication and interaction between Indians and teachers.

We began the test by analyzing student, parent, teacher, and community leader interviews (using our rating scales), several items from the semantic differential for students, and several items from the Teacher Questionnaire. (See Paper #7 in this series for descriptions and examples of these items). After completing this analysis, we drew up a list of questions designed to elicit answers from our field investigators which could be compared with the results of the rating scale and questionnaire analysis. This list of questions was sent to Dr. Connelly and to the Barnhardts without their having seen our results. These two parties replied separately to the questions and returned their responses to us. We then read and closely compared the results of the rating scale and questionnaire analysis with the analysis they had made of their observations. We were particularly interested in how they ranked the four schools in question on a number of variables, since this was what we intended to do with the total sample of schools in Papers No. 10, No. 11, and No. 12 of this series.

A word on the four schools is in order at this point. Three of them are public schools serving coastal reservation Indian communities on the Olympic Peninsula in Washington. At Neah Bay, a school with grades kindergarten to 12 enrolls roughly 300 students, 70 percent of whom are Makah Indians. Quinault Indians at Taholah send their children to two schools. The Taholah school enrolls 130 Quinault children in pre-school classes through sixth grade. This school has been given considerable recognition as an excellent elementary school, having been rated one of the "ten best" in the United States a few years ago. Taholah children in grades seven to twelve are bussed off the reservation to the neighboring town of Moclips, where they constitute 30 percent of the student body in those grades. The fourth school used for this report was the state-operated school in Bethel, Alaska, enrolling nearly 800 students, of whom 90 percent are Eskimo. This is the least acculturated community of the three in our sample, but all are similar in being relatively isolated from the urban-suburban stream of modern American life.

We shall now turn to the question at hand--to what extent do our two analyses agree and to what extent do they disagree? We shall consider the results of our comparison under several headings which demarcate the general topics or issues which our data covered. These are the topics which are covered in the final three papers in this series (Nos. 10, 11, and 12). For these three papers, data from all seven field centers were analyzed using the rating scales and questionnaire items reported on here.

Attitudes and Opinions Regarding Tribal Culture

We concluded, on the basis of the rating scale and questionnaire results, that most students and most parents in all communities were interested in their local native culture, and that most liked the idea that this be included in some way in school. It appeared, however, that only one of the four schools was seen by its Indian community as doing anything to help Indian students learn about their native culture or history. We also concluded that few students or parents had given much thought to either the specific question of how children could be taught about their tribal heritage or the more general question of the nature of the assimilation process. The field team's observations support these

generalizations. The field observers were also able to rank the three communities as to the degree of interest in the native culture and language relative to each other; this was not possible with the rating scale results.

Using the results on the Teacher Questionnaire, we arrived at some conclusions about the teachers. First of all, it appeared that more than half of the teachers disagreed with the statement that Indians should become completely assimilated. Instead, a "pluralistic emphasis" was stressed by most. Nevertheless, most teachers quite clearly saw the most important function of the school to be the preparation of its students for successful lives in the dominant society. The field team's interpretations add to this analysis. The members of the field team all felt that, though many teachers gave lip service to cultural pluralism, few either understood or acted upon it. Almost all worked toward the goal of assimilation. This is a case in which the field workers and the rating scales were in basic agreement, but in which the field workers gave a more explicit interpretation of the situation.

It is impossible for us to evaluate the field workers' specific feelings that few teachers understood or acted upon their verbal commitment to cultural pluralism. Clearly, they had their own idea of what cultural pluralism is--one which they felt few teachers understood--and this clearly constitutes a bias in the sense that anyone who interprets or evaluates something must do so against his own standard.

From the responses to three other questions, we gathered that teachers varied widely in their opinions as to the divergence between what the school taught Indian students and what they learned in their homes. Some indicated that they saw little conflict; others felt that considerable conflict existed and that Indian students should be "wooed away" from their parents' influence. The field workers agreed, but they also felt that many teachers saw the typical Indian child's home life as a severe handicap to good school performance. According to the field team, many teachers believed that Indian parents wanted their children to get a good education, but these same teachers still saw the home background of these students as a significant drawback to their success in school.

Based on the responses to two questions on the teacher questionnaire, we concluded that Bethel and Taholah teachers were more concerned with the use of local cultural materials in the curriculum than Neah Bay and Moclips teachers. The field workers, on the other hand, felt that no significant differences between the teachers in the four schools could be claimed. It was also the field team's opinion that, though some teachers were concerned about the incorporation of native culture into the curriculum, none understood the issue very well and none would act to make any significant changes. This is again a judgment of the field workers which stems to some extent from their own ideas about cultural differences. The findings from the interview and questionnaire analysis that most teachers are overwhelmingly in favor of seeing some course(s) in Indian history and culture started in school and are interested in incorporating aspects of the local culture into the standard curriculum are not contradicted by the field team's observations. They would simply point out that most teachers have little understanding of what the local Indian culture is.

We concluded, after interpreting the scale and questionnaire results, that teachers and community leaders appear to have given this matter of the incorporation of tribal history and culture into the school curriculum more thought than most students and parents, and they might well be the stronger force for such a change at this point. The field workers, on the other hand, were less willing to generalize. They felt that the impetus for programs dealing with tribal culture and history came from different groups (students, parents, teachers, and community leaders) in different communities. Unfortunately, they did not agree very well on which groups were most concerned about this in each community. They clearly did not feel that one could conclude that teachers and influential people were generally more concerned than most students and parents, however.

Approval and Disapproval of the School

Students: There was basic agreement between the overall scale and semantic differential results and the evaluation of the members of the field team that Moclips students were on the whole, less happy with their school than were students in the other three schools. On the basis of the scale results, we also gathered that Bethel students had fewer complaints about their school than students in other schools. The Barnhardts arrived at the same conclusion, though Connelly did not differentiate students at Taholah, Neah Bay, and Bethel on this dimension.

Parents: Again there was general agreement between the scales and the field team that parents were least pleased with the Moclips school. The Barnhardts also agreed with the scale results in stating that Taholah parents approved most highly of their school (Taholah Elementary), though Connelly did not differentiate Taholah parents from Neah Bay and Bethel parents on this dimension.

Connelly agreed with the scale results that little serious criticism of the curriculum existed. He did sense that many teachers, students, and parents were dissatisfied with the curriculum in a general way, but they heard few specific or meaningful criticisms or suggestions for improvement. The Barnhardts, on the other hand, felt that "most parents agreed that the curriculum was inappropriate for Indian students." They may be referring primarily to a feeling among parents that the curriculum should include some work on Indian history and culture; this much was evident from the rating scale analysis of the interviews as well.

On the scale dealing with parent approval or disapproval of teachers, it appeared that Taholah and Bethel parents approved most highly of their teachers while Neah Bay and Moclips parents were somewhat more critical. The Barnhardts did not agree, ranking the schools in order of parental approval of the teachers, from highest to lowest, as: Taholah, Neah Bay, Bethel, and Moclips. Connelly declined to rank the four schools on this dimension, although he did indicate that Taholah parents were somewhat more positive in their evaluations than the others.

The results on the scale concerned with parents' approval or disapproval of the school administration indicated that Taholah parents did not approve more highly of the Taholah administration than they did of the Moclips administration. Connelly felt that Taholah parents approved very highly of the Taholah administration but criticized the Moclips administration quite seriously. On the other hand, he did agree with the scale results that Neah Bay parents were quite critical of their administration.

Finally, we concluded from the interview analysis that few students and parents were very critical of the schools that served them, largely because of a lack of sophistication and knowledge in the area of education. We guessed that many parents felt that, if their children were getting passing grades in school and continuing to attend, the school must be "O K". The fact that the less sophisticated Bethel parents had the most consistently positive ratings seemed to support this. The field team, on the other hand, stressed a different point. Connelly noted that "much of the push for change is involved with a political drive for Indian autonomy and broader participation in decision-making." The Barnhardts also felt that native people most often provided the strongest push for meaningful change. There is certainly a difference between our interpretation of the scale results and the field team members' interpretations of their observations. Our different interpretations certainly reflect our respective biases as well as our different techniques of data-gathering and analysis.

We would like to reconcile and synthesize these two understandings of Indian communities if possible. We feel that, on the one hand, few students and parents are voicing serious, well-thought criticisms of the school or the educational process; Indian communities are no different from most other American communities in this respect. On the other hand, some people--in Taholah and Neah Bay particularly--evidently are raising serious criticisms. Moreover, the potential for more serious and meaningful criticism exists and may develop if the movement for more Indian control of Indian affairs takes hold in many Indian communities at the grass roots level. It also appears that we must not over-emphasize the teachers' dissatisfaction with certain aspects of the school, especially the curriculum. Teachers may be more aware of some of the faults of the schools in which they teach than most parents, but few seem prepared or able to do much about them. While many schools may make minor curricular changes (e.g. offering a course in local Indian history and culture), more fundamental changes leading to a seriously "bi-cultural" or Indian-oriented education are unlikely to be advocated by many teachers at the present time.

Indian Attitudes toward Formal Education

Students: We could not say that students in any one school were more interested in getting a formal education than students in any other school. The field workers did rank the students according to interest in school, but they did not agree with each other.

Parents: From the rating scale analysis we were unable to rank parents according to the degree of concern which they felt in each community for their children's education. The workers did rank them, but again they disagreed with each other as to which community was highest and which was lowest.

Teachers: Based on four items on the Teacher Questionnaire, we concluded that the majority of teachers believed that Indian parents were concerned that their children learn in school, but that less than a third of the teachers in these schools felt that the students were very interested in their education. The Barnhardts appear to agree with this. They indicated that, on the whole, parents were more concerned that their children get an education than the children were themselves. However, all field workers agreed that teachers in most communities--with the possible exception of Neah Bay--felt that Indian parents gave little actual support for continued achievement in school. Most also believed that Indian home life handicapped students as far as their success in school was concerned. We find this compatible with the interview and questionnaire analysis and are inclined to agree with the field team's judgment.

Parents' Knowledge of the School

The scale results agree quite well with the field team's observations. According to the scale analysis, Taholah parents were most knowledgeable about the Taholah school; Neah Bay parents were next, while Bethel parents knew least about their schools. The field workers felt that Neah Bay and Taholah parents were equally knowledgeable (although in different areas), while Bethel parents were least informed.

Teachers' Understanding of the Community

We based our conclusions on two teacher rating scales and found that teachers at Taholah, Neah Bay, and Bethel had a "good understanding of and a relatively broad sympathy for the Indian people and their problems," while teachers at Moclips remained somewhat less understanding and sympathetic. On Scale A (Teachers), the schools were ordered from most to least knowledgeable of the Indian community as: Neah Bay, Bethel, Taholah, and Moclips. On Teacher Scale B, the schools were ranked from most to least "sympathetic" and "understanding" as follows: Bethel, Taholah, Neah Bay, and Moclips. Connelly did not feel that these schools could be ranked on these bases, noting instead that there were some well-informed and sympathetic teachers in all schools. The Barnhardts did rank the four schools and disagreed with our ranking based on the scale results. For both "knowledge" and "sympathy," they ranked teachers (from highest to lowest) as: Taholah, Neah Bay, Bethel, and Moclips, stressing that Taholah and Neah Bay were actually quite similar. This lack of agreement between the scales and the Barnhardts is disappointing, though we should note that the difference in mean scores between Taholah, Neah Bay, and Bethel teachers was less than .50 on both rating scales used for this dimension. Only Moclips teachers stood out as markedly different from teachers in the other schools. It is obvious that we should not draw conclusions from such small differences in mean scores in the rating scale analysis.

Involvement of the Community in School Affairs

The field team's observations agreed with the results on the parent scale dealing with involvement of the community in school affairs, but the field workers were able to provide more information about the specific situations in each community than the scales were. All agreed that Taholah parents were most involved with their school, Neah Bay parents next, and Bethel parents least. Connelly noted that only in Taholah did the Indian community really control the school (through an all-Indian school board), though even there, the fact that few parents understood the school program and its goals made this control less meaningful. At the other extreme was Bethel, where the school was operated by the state of Alaska and where most native parents had very little comprehension of or involvement in school affairs.

Conclusions

With some significant exceptions, agreement between the rating scale and questionnaire analysis and the field workers' observations on ranking and comparing the four schools was good. The main exceptions were: (1) In evaluating parental opinions of the school administration in the four schools, the field team was in marked disagreement with the scale results; (2) In ranking the four schools according to the teachers' "understanding of the local Indian community," there was no agreement on the ranking of three of the four schools; (3) The scales sometimes failed to differentiate between schools where the field workers felt they could; and (4) The field workers sometimes felt that no meaningful differentiation between or ranking of schools could be done where we had done so with the scale results.

The more important area of disagreement between the analysis of the interviews and questionnaires and the field workers' observations was in the interpretation of what each "saw." For example, the members of the field team felt that, though many teachers voiced support for a policy of "cultural pluralism" and wanted a course in Indian history and culture, few if any understood the native culture or the idea of "bi-cultural education." Another major difference in interpretations was in evaluating the degree of dissatisfaction in the native community (students and parents), the school (teachers and administrators), and among influential persons in the community. We interpreted the scale results as indicating that students and parents voiced few serious criticisms of the schools while we saw teachers and community leaders as more critical and more apt to institute changes. The field team members felt that meaningful changes would only come as a result of agitation from the native community, and this they believed was possible. In addition to such major differences in interpretation, of course, the interpretation of the scale results was plagued by a lack of knowledge of the individual communities which would have "explained" the reasons for the differences in attitudes, opinions, and perceptions between different communities and between different members of the same community.

In answer to our original questions: Are the differences in the distributions of ratings and in mean "scores" between schools valid? Are these differences consistent with the observations of the field team?, the answer is a qualified yes. The qualification is that these differences must be quite large to be considered valid. Even then, we must expect that a small percentage of our results may not be in accord with the field teams' observations. However, the question of how to interpret the results of this analysis--a vitally important but sticky problem in all such research as this--is difficult to evaluate. We recognize, of course, that both those who observed in the field and those who analyzed the interviews and interpreted the results of the ratings incorporate their particular biases in their interpretations of their data. However, we do feel that skilled field observers have a better basis for interpreting much of the data than do those who simply read and rated the interviews. Our conclusion, then, is that field workers need to add their observations and interpretations to the results of the interview and questionnaire analysis in preparing the reports of this study.